backcrosses of an existing Rondo pea mutant, Nod3, with the recurrent parent cultivar Juneau (PV 7400054). Near-isogenic line. A monogenic recessive mutant. When inoculated with Rhizobium leguminosarum nodule numbers are higher than normal even in the presence of nitrates. This line can be used in agronomic and physiological studies of nitrogen fixation, and as a source of genetic material.

PI 598368. Pisum sativum L.
Genetic. Pureline. A317 Nod3I. GS-3. Pedigree - Developed by crossing two existing mutants, A317 which is in a Juneau background, and Nod3 which is in Rondo background, then backcrossing for six generations the double mutant with the recurrent parent cultivar Juneau (PV 7400054). Near-isogenic line. A double mutant with NADH-nitrate reductase activity (nar 1) that is less than 6% of the wild type (incompletely dominant character), and with a higher than normal number of nodules even in the presence of nitrate (monogenic recessive character). Propagation must be performed with effectively nodulated plants. This line can be useful in agronomic and physiological studies of nitrogen fixation and nitrate metabolism, and as a source of genetic material.

PI 598369. Pisum sativum L.
Genetic. Pureline. E135I. GS-4. Pedigree - Developed from six backcrosses of an existing Sparkle pea mutant, E135, with the recurrent parent cultivar Juneau (PV7400054). Near-isogenic line. Mutant conditioned by monogenic recessive allele at the sym 13 locus. When inoculated with Rhizobium leguminosarum, forms a normal number of white root nodules lacking nitrogenase activity. Can be used in agronomic and physiological studies of nitrogen fixation and as a source of genetic material.

PI 598370. Pisum sativum L.
Genetic. Pureline. R25I. GS-5. Pedigree - Developed from six backcrosses of an existing Sparkle pea mutant, R25, with the recurrent parent cultivar Juneau (PV 7400054). Near-isogenic line. A non-nodulating mutant conditioned by a monogenic recessive allele at the sym 8 locus. This line can be used in agronomic and physiological studies of nitrogen fixation, and as a source of genetic material.

The following were collected by Thomas S. Elias, Rancho Santa Ana Botanic Garden, Claremont, California 91711-3101, United States; D. Murray. Donated by Thomas S. Elias, Rancho Santa Ana Botanic Garden, Claremont, California 91711-3101, United States. Received 11/12/1988.

PI 598371. Elymus sibiricus L.
Wild. 11583; BE-2066; W6 83. Collected 08/02/1988 in Russian Federation. Elevation 50 m. Along shoreline of Lake Sirotinka, about 85km NW of Chita between Tasey and Mukhor-Konduy, Chita Oblast, Eastern Siberia. Plants associated with Larix duhurica and Betula platyphylla forest with some Salix and Populus tremula. Seeds somewhat immature.

The following were donated by John D. Berdahl, USDA/ARS, Northern Plains Research Lab., P.O. Box 459, Mandan, North Dakota 58554, United States. Received 02/08/1990.